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INFLUENZA—PREVALENCE IN THE UNITED STATES.

The death rate from influenza and pneumonia (all forms) in the 40 large cities included in the Weekly Health Index of the Bureau of the Census, for which the necessary data are available, showed a slight increase during the week ended February 14, as compared to the rate in the preceding week, considering these cities as a single group. The weekly excess mortality from these causes above the seasonal "normal" during the present epidemic through February 14 and in corresponding weeks of the 1918 epidemic wave is shown in the following table:

TABLE A.—*Comparison of the excess* [1] *annual mortality rate per 100,000 from influenza and pneumonia (all forms), by weeks, during the 1920 epidemic with that for corresponding weeks in the 1918 epidemic in cities included in the Weekly Health Index of the Bureau of the Census, considered as a whole.*

Week ended—	Excess over corresponding week of median year.	Week ended—	Excess over corresponding week of median year.
1918.		1920.	
Sept. 7		Jan. 3	−56
14	−6	10	−55
21	76	17	−27
28	326	24	184
Oct. 5	1,028	31	746
12	2,557	Feb. 7	1,241
19	4,592	14	1,306
26	4,695		
Nov. 2	3,332		
9	1,832		
16	989		
23	620		
30	526		
Dec. 7	617		
14	792		
21	801		
28	629		

[1] Excess over the mortality rate from the same causes in the corresponding week of the median year in the period 1910–1916. The weekly rates for the median year for each month have been approximated by platting the rate for the median year for each month (thus affording a rough "normal" seasonal curve) for each city, and then by reading from the curve the indicated median rate at the midpoint for each week. The excess has been found by subtracting this median rate from the actual rate for the corresponding weeks in 1918 and 1920.

While it is, of course, impossible to forecast with absolute certainty the future course of the epidemic, present indications are that the week ended February 14 marks the peak of mortality in this epidemic wave for this group of cities as a whole. This may be inferred from several facts.

First, there has already been a very definite decline in the mortality rate in 12 of these cities with an aggregate population of about 11,000,000, which is slightly more than half of the population of the group. Judging from experience in these cities, the peak of mortality appears to have been reached in another group of cities (about 15 in number) with an aggregate population of approximately 5,000,000, leaving a population of only about 5,200,000 in 13 cities in which a further increase of death rate seems probable. It is unlikely that such further increases as may occur in the latter group of cities will be sufficient to counterbalance the decreasing death rate which is indicated in the larger and more populous group.

Second, a further indication that the peak of mortality has been reached in the group of large cities referred to is the fact that up to the week ended February 14 the increase in excess mortality from influenza and pneumonia has been at a fairly constant *diminishing* rate which, if maintained, should show by the week ended February 21 that the peak will have been passed.

Third, a further indication of a probable decline in mortality within the next week is indicated by the morbidity reports from State health departments to the Public Health Service, as shown in Table I. A definite decrease in the number of cases reported is shown for the large area including the Central and North Central States as well as in Connecticut, Pennsylvania, New Jersey, and Virginia, while apparently the epidemic has reached or is about reaching its peak in all other sections of the country for which reports are available, except in New England (exclusive of Connecticut), in the Southern States generally, and in California and Oregon.

TABLE 1.—*Influenza case reports. Number of cases of influenza occurring in various States as reported to the Public Health Service by State health departments.*

[States omitted are those from which no reports have been received. Blank spaces indicate that no report was received for the week. These figures are preliminary and are subject to correction.]

State.	Average per week in December, 1919.	Cases reported week ended January—					Cases reported week ended February—	
		3	10	17	24	31	7	14
Alabama	5				8	203	1,296	3,236
Arkansas	26	52	35	53	179	595	5,666	6,599
California	24	14	32	322	1,604	7,133	13,660	11,887
Connecticut	5	1	1	14	1,123	4,664	5,666	4,868
Delaware	3	1	1		5	21	86	78
District of Columbia	4	23	9	126	1,216	1,616	557	298
Florida	6	14	2	10	484	1,547	1,581	1,735
Georgia	25	10	27	27	95	617	3,256	5,411
Idaho			88	270	922	2,783	2,394	
Illinois	55	60	73	3,251	14,805	29,156	30,330	23,037
Indiana	41	31	18	44	1,714		7,811	7,507
Iowa	3	1	10	30	644	3,960	5,070	1,983
Kansas	11	22	17	45	1,130	8,582	16,960	17,691
Kentucky	44	41	45	75	170	878	2,536	2,109
Louisiana	13	32	52	27	123	763	1,901	3,690
Maine	2	7	1	4		387	936	3,942
Maryland							[1] 4,935	[1] 8,942
Massachusetts	31	41	40	54		3,730	9,731	12,389
Michigan							14,201	13,470
Minnesota						5,775	11,397	7,555

[1] Week ended Friday.

TABLE 1.—*Influenza case reports. Number of cases of influenza occurring in various States as reported to the Public Health Service by State health departments*—Contd.

State.	Average per week in December, 1919.	Cases reported week ended January—					Cases reported week ended February—	
		3	10	17	24	31	7	14
Missouri						4,043	5,359	1,696
Montana	3	2	0	1	67	1,022	1,847	1,650
Nebraska	1		2	1	154	1,815	3,998	6,048
New Hampshire							610	
New Jersey	28	22	23	98	753	7,365	9,603	5,807
New Mexico	3	2	8	4	61	260	1,576	1,166
New York (exclusive of New York City)	36	52	31	61	555	4,755	11,616	13,259
New York City	58	42	100	384	5,690	30,456	21,388	8,091
North Carolina						3,356	12,892	25,571
North Dakota							946	497
Oregon							1,042	1,318
Pennsylvania							16,090	13,324
South Carolina						1,661	[1] 3,179	3,916
South Dakota	1			3	118		5,042	4,976
Tennessee							2,331	[2] 1,432
Texas							11,265	6,788
Vermont	1				25	89	272	795
Virginia						3,097	6,318	2,934
Washington	1				12	902	6,451	6,426
West Virginia						1,667	4,732	6,308
Wisconsin	3	6	3	67	1,944	6,739	14,328	10,310
Wyoming						1,372		
Total	433	476	618	4,971	33,601	141,009	280,855	258,740
Number of States reporting	25	20	22	22	24	31	40	38

[1] Six days only. [2] Five days only.

It is of interest to note that the excess mortality curve of the present epidemic wave for the 42 large cities included in the Weekly Health Index considered as a whole has, up to February 14, followed in its general shape the curve of excess mortality for the same group of cities during the autumn wave of the epidemic in 1918. But there are two respects in which the curves of the two epidemic waves differ, which would appear to possess sufficient significance to warrant comment. One is that the peak is apparently being reached earlier in this wave than it was in the 1918 epidemic—a condition that presages an epidemic wave of shorter duration than in 1918. (It is, of course, impossible to forecast the probability of a recrudescence in any locality or group of localities.) The other difference has already been commented upon in these pages, namely, that the excess mortality rate for the group of cities as a whole is much lower in this epidemic wave than in 1918. The conclusion seems to be warranted, upon the basis of such indications as are so far available, that the present epidemic wave will be very much less severe than the epidemic of 1918. It is doubtful if the excess mortality will be more than 40 per cent of what it was in the principal wave of the 1918 epidemic.

This is not true of all cities, however, at least through the week ended February 14. A comparison of the maximum annual rates reached in the weeks of highest mortality in this epidemic and in the epidemic of 1918, respectively, in the 12 cities which have apparently already passed their peak is given in Table B. In 9 of

these cities the peak of the mortality of the 1920 epidemic has been undoubtedly lower than in 1918, ranging from 24 to 75 per cent; but in 3 cities, Kansas City, Minneapolis, and St. Louis, the peak rate in this epidemic has exceeded that in the last epidemic. It is stated in the Weekly Health Review, issued by the city of Detroit Department of Health for the week ended February 7, that the epidemic had up to that time in Detroit caused a higher rate of mortality than was experienced in the corresponding stage of the epidemic of 1918.

TABLE B.—*Excess of mortality* [1] *from influenza and pneumonia (all forms) in peak week of 1920 epidemic compared with that of 1918 epidemic in certain cities.*

City.	Week in which peak occurred.		Excess annual rate per 100,000—peak week.		Per cent which 1920 peak week excess rate is of 1918 peak week excess rate.
	1918	1920	1918	1920	
Chicago	Oct. 26	Jan. 31	4,620	1,886	41
Milwaukee	...do	...do	1,915	1,434	75
Washington	Oct. 19	...do	7,989	2,072	26
Dayton	Oct. 26	Feb. 7	5,352	1,876	37
Kansas City, Mo	Nov. 2	...do	3,173	3,656	115
Minneapolis	Oct. 26	...do	1,963	2,285	116
New York	...do	...do	5,091	1,987	39
Oakland	Nov. 2	...do	5,679	1,339	24
St. Louis	...do	...do	1,581	2,681	170
St. Paul	Nov. 16	...do	2,664	1,619	61
Syracuse	Oct. 19	...do	8,085	2,875	37
Toledo	Oct. 26	...do	2,642	1,074	41

[1] Excess over the mortality rate from same causes in the corresponding week of the median year in the period 1910-1916. The weekly rates for the median year have been approximated by plotting the rate for the median year for each month (thus affording a rough "normal" seasonal curve) for each city and then by reading from the curve the indicated median rate at the midpoint for each week. The excess has been found by subtracting this median rate from the actual rate for the corresponding week in 1918 and 1920.

It may be of interest at this time in a preliminary way to note that in this epidemic wave, as in the autumn wave of 1918, there is a quite definite geographical movement of the epidemic at successive time intervals. As already pointed out, for the week ended February 14 morbidity reports indicate that the peak definitely has been passed in the Central and north Central States and in Connecticut, Pennsylvania, New Jersey, and Virginia; while reports of increasing morbidity were received from nearly all of the New England States, nearly all of the South Atlantic and Southern States generally, and from two Pacific States—California and Oregon. Between these groups of States are contiguous areas in which the reports of the week ended February 14 show very slight increases in morbidity, indicating, if the reports may be considered reliable, that the epidemic has practically reached its peak in this zone. Reference to a map will show that States in which decreasing morbidity rates are reported fall into two well-defined groups, a central and an eastern, while those States showing increased morbidity rates at present fall

into three groups, a northern, an eastern and southern, and a western, with large areas intermediate between these groups showing a nearly stationary condition or rendering no report or insufficient data. This would seem to indicate that the epidemic has had at least two well-separated areas of early development—one in the region of the Great Lakes, and one in the Middle Atlantic area represented by New York City and Washington, D. C.

In a general way the course of the epidemic in large cities, as indicated by mortality rates corresponding to the same geographic grouping, corresponds to that as indicated by the State morbidity reports. Allowance must be made, of course, for a lag of a week or 10 days in comparing mortality and morbidity returns.

In Table II is given the number of deaths from influenza and pneumonia (all forms), by weeks, in January and February to date, as reported in the Weekly Health Index of the Bureau of the Census.

TABLE II.—*Deaths from influenza and pneumonia (all forms) in certain large cities, by weeks, in January and February, 1920.*

City.	Week ended—						
	Jan. 3.	Jan. 10.	Jan. 17.	Jan. 24.	Jan. 31.	Feb. 7.	Feb. 14.
Albany, N. Y.	6	3	2	3	14	19	29
Atlanta, Ga.	[1] 6	[1] 17	[1] 10	[1] 10	15	32	[1] 68
Baltimore, Md.	30	20	35	24	59	122	268
Birmingham, Ala.	11	[1] 11	[1] 8	16	14	22	18
Boston, Mass.	24	28	28	45	85	158	255
Buffalo, N. Y.	13	10	7	19	17	67	141
Cambridge, Mass.	4	8	7	8	14	22	28
Chicago, Ill.	98	107	153	472	1,109	1,005	494
Cincinnati, Ohio.	18	14	12	17	25	38	62
Cleveland, Ohio.	28	21	25	26	41	158	258
Columbus, Ohio.	5	15	9	8	22	59	118
Dayton, Ohio.	7	4	7	13	46	47	32
Denver, Colo.	15	21	18	24	49	159	160
Fall River, Mass.	3	7	10	5	3	5	16
Grand Rapids, Mich.	3	1	4	2	6	31	37
Indianapolis, Ind.	[1] 3	18	[1] 16	21	36	92	124
Jersey City, N. J.	12	14	14	24	64	[2]	[2]
Kansas City, Mo.	12	13	29	96	120	220	167
Los Angeles, Calif.	18	16	18	19	22	42	88
Louisville, Ky.	9	10	10	9	18	40	52
Lowell, Mass.	3	5	4	2	7	12	10
Memphis, Tenn.	15	12	12	11	10	22	64
Milwaukee, Wis.	15	25	[1] 13	45	141	184	121
Minneapolis, Minn.	20	12	10	9	63	168	[3] 95
Nashville, Tenn.	4	6	11	6	12	8	23
Newark, N. J.	15	17	14	30	55	116	142
New Haven, Conn.	11	6	8	10	19	20	60
New Orleans, La.	18	27	27	27	32	36	62
New York, N. Y.	195	218	261	511	1,308	1,988	1,796
Oakland, Calif.	7	4	8	20	24	55	54
Omaha, Nebr.	5	4	7	13	45	62	[2]
Philadelphia, Pa.	64	55	75	108	153	289	564
Pittsburgh, Pa.	55	47	53	55	76	168	417
Portland, Oreg.	[1] 4	[1] 13	[1] 8	[1] 9	15	21	[2]
Providence, R. I.	6	12	13	8	14	39	88
Richmond, Va.	6	2	9	6	21	35	38
Rochester, N. Y.	8	13	7	12	23	50	52
St. Louis, Mo.	47	57	41	73	236	401	282
St. Paul, Minn.	7	4	[2]	26	72	80	[3] 46
San Francisco, Calif.	20	14	26	48	59	115	137
Seattle, Wash.	9	[1] 2	4	7	12	32	98
Spokane, Wash.	0	4	3	3	12	32	[3] 39
Syracuse, N. Y.	6	9	8	10	31	89	78
Toledo, Ohio.	8	9	8	9	18	54	50
Washington, D. C.	32	22	27	81	181	164	92
Worcester, Mass.	5	10	9	7	14	15	44

[1] Deaths from pneumonia (all forms) only. [2] No report. [3] Deaths from influenza only.

In Table III is presented the annual mortality rate per 100,000 from influenza and pneumonia (all forms), by weeks, in January and February to date for those cities reported in the Weekly Health Index for which population estimates are available. For convenience in comparison the "normal" annual rate from these causes in the corresponding weeks is also shown in Table III. The method by which this "normal" rate was found is explained in the footnotes to the table.

TABLE III.—*Annual death rate per 100,000 from influenza and pneumonia (all forms), by weeks ended Jan. 3 to Feb. 14, 1920, and for corresponding weeks of the median year in the period 1910–1916.*[1]

City.	In median year of the period 1910–1916.							1920.						
	Week ended—							Week ended—						
	Jan. 3.	Jan. 10.	Jan. 17.	Jan. 24.	Jan. 31.	Feb. 7.	Feb. 14.	Jan. 3.	Jan. 10.	Jan. 17.	Jan. 24.	Jan. 31.	Feb. 7.	Feb. 14.
Albany, N. Y.	332	390	407	406	399	387	370	278	139	93	139	649	880	1,350
Atlanta, Ga.	240	230	225	228	239	253	276	[2]155	[2]439	[2]258	[2] 258	388	827	[2]1,758
Baltimore, Md.	339	360	368	367	358	345	341	233	156	272	187	459	949	2,086
Birmingham, Ala.	295	291	294	307	325	337	344	290	[2]290	[2]211	422	369	580	475
Boston, Mass.	290	299	300	300	298	296	294	159	186	186	299	564	1,049	1,693
Buffalo, N. Y.	212	212	211	212	214	216	220	143	110	77	209	187	738	1,554
Cambridge, Mass.	255	263	266	267	264	258	252	187	374	328	374	655	1,029	1,310
Chicago, Ill.	299	333	344	344	341	337	333	197	215	307	948	2,227	2,018	993
Cincinnati, Ohio.	232	246	258	266	271	275	276	224	175	150	212	312	474	773
Cleveland, Ohio.	180	176	174	173	173	174	177	180	135	161	167	264	1,016	1,660
Columbus, Ohio.	219	217	214	212	210	210	212	116	347	208	185	509	1,366	2,731
Dayton, Ohio.	228	261	268	270	269	265	260	279	160	279	519	1,836	1,876	1,277
Fall River, Mass.	250	279	307	344	394	435	450	122	284	406	203	122	203	650
Grand Rapids, Mich.	130	144	152	156	154	146	139	115	39	154	77	231	1,193	1,424
Indianapolis, Ind.	222	261	276	276	259	233	223	[2] 54	323	[2]287	377	646	1,652	2,227
Jersey City, N. J.	286	293	296	295	292	289	287	196	229	229	393	1,047	[3]	[3]
Kansas City, Mo.	230	247	261	275	286	294	300	199	216	482	1,595	1,994	3,656	2,775
Los Angeles, Calif.	181	186	188	187	183	174	161	165	147	165	174	202	385	807
Louisville, Ky.	205	218	228	234	236	239	243	193	215	215	193	387	859	1,117
Lowell, Mass.	288	305	313	316	308	291	271	143	293	191	96	335	574	478
Memphis, Tenn.	312	323	330	330	327	322	320	505	404	404	371	337	741	2,156
Milwaukee, Wis.	169	176	181	185	187	189	190	172	287	[4]149	517	1,621	2,116	1,391
Minneapolis, Minn.	184	204	220	228	228	220	206	272	163	136	122	857	2,285	[5]1,292
Nashville, Tenn.	305	309	312	317	332	367	393	175	262	481	262	525	350	1,006
Newark, N. J.	259	271	276	274	261	243	224	182	207	170	365	669	1,411	1,727
New Haven, Conn.	370	424	438	440	432	402	390	370	202	269	337	640	673	2,020
New Orleans, La.	282	301	318	333	344	350	354	246	368	368	368	436	491	846
New York, N. Y.	256	260	265	270	276	282	290	195	218	261	511	1,308	1,987	1,795
Oakland, Calif.	186	181	174	165	153	143	130	170	97	195	487	584	1,339	1,315
Omaha, Nebr.	262	267	272	281	295	305	310	145	116	202	376	1,302	1,793	[3]
Philadelphia, Pa.	265	279	286	291	290	289	286	189	163	222	320	453	856	1,670
Pittsburgh, Pa.	363	382	391	394	388	377	368	483	413	466	483	668	1,476	3,665
Providence, R. I.	246	271	290	301	309	314	320	119	237	257	158	277	771	1,741
Richmond, Va.	325	345	362	369	373	375	376	195	65	292	195	681	1,136	1,233
Rochester, N. Y.	199	218	225	225	218	206	200	158	256	138	236	453	984	1,024
St. Louis, Mo.	299	309	313	311	300	282	257	314	381	274	488	1,578	2,681	1,885
St. Paul, Minn.	154	160	163	162	159	154	150	142	81	[3]	526	1,457	1,619	[5]931
San Francisco, Calif.	222	221	216	204	181	162	152	218	153	283	523	643	1,253	1,493
Syracuse, N. Y.	184	191	199	208	217	224	229	194	291	258	323	1,001	2,875	2,520
Toledo, Ohio.	140	156	176	192	202	209	214	159	189	159	180	358	1,074	994
Washington, D. C.	240	252	262	270	278	284	293	415	286	351	1,052	2,350	2,129	1,194
Worcester, Mass.	267	299	320	333	341	346	348	150	300	270	210	420	450	1,321

[1] The weekly rate for the median year in the period 1910–1916 is presented as a "normal" rate. It is, of course, only approximated, and was found by plotting the rate for the median year for each month (thus affording a rough "normal" seasonal curve) for each city, and then by reading from the curve the indicated median rate at the midpoint of each week.

[2] For pneumonia only.

[3] No report.

[4] Death rate for pneumonia only. N. B. Rate given in Public Health Reports for Feb. 13 (1,299) was an error

[5] Influenza only.

Table IV is based on Table III and shows the excess of the annual death rate from influenza and pneumonia (all forms), by weeks, in January and February to date, over the seasonal "normal" in the same cities.

TABLE IV.—*Excess of annual death rate per 100,000 from influenza and pneumonia (all forms), by weeks ended Jan. 3 to Feb. 14, 1920, over that in corresponding week of median year (1910–1916) in certain large cities.*[1]

City.	Week ended—						
	Jan. 3.	Jan. 10.	Jan. 17.	Jan. 24.	Jan. 31.	Feb. 7.	Feb. 14.
Albany, N. Y.	− 54	−251	−314	−267	250	493	980
Atlanta, Ga.	[2] − 85	[2] 209	[2] 33	[2] 30	149	574	[2] 1,482
Baltimore, Md.	−106	−204	− 96	−180	101	604	1,745
Birmingham, Ala.	− 5	[2] − 1	[2] − 83	115	44	243	131
Boston, Mass.	−131	−113	−114	− 1	266	753	1,399
Buffalo, N. Y.	− 69	−102	−134	− 3	− 27	522	1,334
Cambridge, Mass.	− 68	111	62	107	391	771	1,058
Chicago, Ill.	−102	−118	− 37	604	1,886	1,681	660
Cincinnati, Ohio.	− 8	− 71	−108	− 54	41	199	497
Cleveland, Ohio.	0	− 41	− 13	− 6	91	843	1,483
Columbus, Ohio.	−103	−130	− 6	− 27	299	1,156	2,519
Dayton, Ohio.	51	−101	11	249	1,567	1,611	1,017
Fall River, Mass.	−128	5	99	−141	−272	−232	200
Grand Rapids, Mich.	− 15	−105	2	− 79	77	1,047	1,285
Indianapolis, Ind.	[2] −168	62	[2] 11	101	587	1,419	2,004
Jersey City, N. J.	− 90	− 64	− 67	98	755	[3]	[3]
Kansas City, Mo.	− 31	− 31	221	1,320	1,708	3,362	2,475
Los Angeles, Calif.	− 16	− 39	− 23	− 13	19	211	646
Louisville, Ky.	− 12	− 3	− 13	− 41	151	620	874
Lowell, Mass.	−145	− 66	−122	−220	27	283	207
Memphis, Tenn.	193	81	74	41	10	419	1,836
Milwaukee, Wis.	3	111	[4] − 32	332	1,434	1,927	1,201
Minneapolis, Minn.	88	− 41	− 84	−106	629	2,065	[5] 1,086
Nashville, Tenn.	−130	− 47	169	− 55	193	− 17	613
Newark, N. J.	− 77	− 64	−106	91	408	1,168	1,503
New Haven, Conn.	0	−222	−169	−103	208	271	1,630
New Orleans, La.	− 36	67	50	35	92	141	492
New York, N. Y.	− 61	− 42	− 4	241	1,032	1,705	1,505
Oakland, Calif.	− 16	− 84	21	395	431	1,196	1,185
Omaha, Nebr.	−117	−151	− 70	95	1,007	1,488	[3]
Philadelphia, Pa.	− 76	−116	− 64	29	163	567	1,384
Pittsburgh, Pa.	120	31	75	89	280	1,099	3,297
Providence, R. I.	−127	− 34	− 33	−143	−32	457	1,421
Richmond, Va.	−130	−280	− 70	− 74	308	761	857
Rochester, N. Y.	− 41	38	− 87	11	235	778	824
St. Louis, Mo.	15	72	− 39	177	1,278	2,399	1,628
St. Paul, Minn.	− 12	− 79	[3]	364	1,298	1,465	[5] 781
San Francisco, Calif.	− 4	− 68	67	319	462	1,091	1,341
Syracuse, N. Y.	10	100	59	115	784	2,651	2,291
Toledo, Ohio.	19	24	− 17	− 12	156	865	780
Washington, D. C.	175	34	89	782	2,072	1,845	901
Worcester, Mass.	−117	1	− 50	−123	79	104	973

[1] The weekly rates for the median year in the period (1910–1916) have been approximated by plotting the rate for the median year for each month (thus affording a rough "normal" seasonal curve) for each city, and then by reading from the curve the indicated median rate at the midpoint for each week. The excess has been found by subtracting this median rate from the actual rate for each week in 1920. When the difference is "minus" it is so indicated.

[2] For pneumonia only.

[3] No report.

[4] Excess rate for pneumonia only. N. B.—Excess rate given in Public Health Reports of Feb. 13; (1118) was an error.

[5] For influenza only.

In order to facilitate the comparison of the present epidemic in the cities included in the Weekly Health Index with the epidemic of 1918 for the same cities, the excess mortality rates from influenza and pneumonia (all forms), by weeks, from September 8 to Novem-

ber 30, 1918, are shown. These excess rates may be compared with those given in Table IV. It should be noted that the excess rates as computed in Tables IV and V are only approximated, but they are believed to be sufficiently accurate to afford a fair basis for determining the mortality from influenza and pneumonia (all forms), which properly may be attributed to epidemic conditions.

TABLE V.—*Excess of annual death rate per 100,000 from influenza and pneumonia (all forms), by weeks, Sept. 8 to Nov. 30, 1918, over that in corresponding week of median year (1910–1916) in certain large cities.*[1]

City.	Sept. 14.	Sept. 21.	Sept. 28.	Oct. 5.	Oct. 12.	Oct. 19.	Oct. 26.	Nov. 2.	Nov. 9.	Nov. 16.	Nov. 23.	Nov. 30.
Albany, N. Y.	37	.....	31	29	2,018	5,025	8,535	7,087	2,300	800	41	488
Atlanta, Ga.	110	.....	15	82	666	1,972	2,471	849	633	499	402	643
Baltimore, Md.	−37	−50	43	794	4,253	10,419	8,194	2,915	953	189	53	65
Birmingham, Ala.	−23	−26	−33	322	1,493	2,770	3,369	2,095	1,061	1,056	990	1,694
Boston, Mass.	188	1,634	5,015	7,925	6,680	3,765	1,350	753	343	143	172	156
Buffalo, N. Y.	17	56	96	444	1,892	5,752	7,880	4,894	1,723	743	217	216
Cambridge, Mass.	253	109	4,829	6,461	5,285	2,845	867	759	189	262	248	140
Chicago, Ill.	−53	−50	79	728	1,988	4,105	4,620	2,801	1,316	600	305	223
Cincinnati, Ohio.	− 1	−21	− 4	137	749	2,291	3,386	2,957	1,882	1,046	1,137	997
Cleveland, Ohio.	−26	− 9	− 2	44	177	928	2,818	4,282	3,256	2,132	1,405	1,113
Columbus, Ohio.	−28	40	83	170	579	1,613	2,623	2,084	1,057	721	860	1,315
Dayton, Ohio.	33	− 9	23	132	1,155	5,248	5,352	4,463	2,535	688	45	359
Fall River, Mass.	.....	264	715	3,863	8,095	7,730	3,863	1,533	869	447	267	128
Grand Rapids, Mich.	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,059	788	628
Indianapolis, Ind.	− 6	44	111	356	745	2,210	1,968	1,402	926	735	967	1,653
Jersey City, N. J.	−65	− 2	242	973	3,666	.....	6,823	.....	.....	.....	.....	.....
Kansas City, Mo.	28	.....	103	47	1,521	2,713	3,117	3,173	2,177	1,198	921	1,461
Los Angeles, Calif.	26	−14	−42	70	576	1,144	2,625	3,435	2,759	2,664	1,688	1,405
Louisville, Ky.	20	143	26	228	1,889	3,764	3,770	1,348	1,098	678	584	1,159
Lowell, Mass.	−15	311	1,451	4,358	6,644	5,441	3,902	1,311	252	242	375	−73
Memphis, Tenn.	.....	.....	.....	.....	2,624	6,042	5,479	2,254	.....	392	402	−20
Milwaukee, Wis.	.....	− 4	91	108	711	1,215	1,915	1,328	971	675	427	873
Minneapolis, Minn.	−19	.....	97	120	592	1,280	1,963	1,541	1,191	1,151	575	490
Nashville, Tenn.	21	.....	45	124	5,538	8,327	5,420	2,206	2,135	446	464	747
Newark, N. J.	.....	9	27	565	2,205	4,709	5,123	4,444	2,014	1,200	687	501
New Haven, Conn.	.....	−32	401	1,102	2,479	4,996	6,033	5,519	2,615	1,459	503	621
New Orleans, La.	−23	.....	−54	294	1,852	8,385	9,156	4,368	1,957	822	281	356
New York, N. Y.	−20	11	93	629	2,010	4,107	5,091	4,259	2,122	885	473	223
Oakland, Calif.	19	.....	−32	− 9	354	936	3,271	5,679	3,728	1,603	811	164
Omaha, Nebr.	−53	.....	−26	121	1,887	4,547	4,164	2,618	.....	1,245	929	790
Philadelphia, Pa.	− 3	31	157	2,014	7,716	13,515	8,841	3,448	986	350	154	106
Pittsburgh, Pa.	−18	14	146	430	805	3,197	4,816	5,269	6,726	4,369	3,070	2,293
Providence, R. I.	3	115	348	1,868	3,587	4,948	4,210	2,558	1,162	575	502	290
Richmond, Va.	66	31	57	1,246	4,149	6,275	4,025	2,166	760	586	243	577
Rochester, N. Y.	−42	−49	61	32	612	1,902	4,077	3,989	1,914	886	646	585
St. Louis, Mo.	15	17	57	82	478	1,135	1,436	1,581	1,378	1,358	1,089	1,374
St. Paul, Minn.	21	.....	12	−32	1,177	1,458	1,091	2,000	2,141	2,664	1,705	1,306
San Francisco, Calif.	−28	53	55	50	92	1,300	5,899	7,927	4,397	2,041	857	466
Syracuse, N. Y.	.....	.....	1,150	4,410	6,991	8,085	4,425	2,088	784	610	83	76
Toledo, Ohio.	−20	.....	30	−13	101	886	2,642	2,168	1,575	769	690	421
Washington, D. C.	68	52	373	2,174	6,257	7,989	4,955	2,240	584	394	312	364
Worcester, Mass.	141	438	2,955	5,891	6,813	4,702	2,465	1,662	.....	272	744	462

[1] The weekly rates for the median year in the period 1910-1916 have been approximated by plotting the rate for the median year for each month (thus affording a rough "normal" seasonal curve) for each city, and then by reading from the curve the indicated median rate at the mid-point for each week. The excess has been found by subtracting this median rate from the actual rate for each week in 1918. When the difference is "minus" it is so indicated.